

AFFIDAVIT OF SHIVANI ARJUNA

1. My name is Shivani Arjuna. I live at N1762 Mueller Hiller Road, Belgium, Wisconsin, 53004..
2. In 2002 I experienced numerous symptoms, for which \$18,000 worth of medical tests, including an MRI of my brain, could find no cause. These symptoms included: cardiac preatrial syndrome, tingling/numbness of left arm and leg, pain in left side of head and insomnia so severe that I was sleeping perhaps 5 hours total a night. (Although exhausted, I could not fall asleep for hours. Then after sleeping briefly I would suddenly awaken and have to try once again to sleep.) I also began to experience sudden, sharp rises in blood pressure and heart rate, which would periodically both double for perhaps 20 minutes, accompanied by irregular heartbeat. I became semi-invalid, so weak I had to sit and rest after walking across a room. If I walked into close proximity of a direct electromagnetic radiation broadcasting source such as a TV or a CFL bulb, I had immediate muscle spasms.
3. I went to numerous medical doctors and alternative wellness practitioners, but to no avail. None of them could determine the cause of any of my symptoms.
4. When someone noted that my symptoms were consistent with those caused by exposure to electrical pollution (radio-wave frequencies present in the utility-provided electricity and being broadcast from electrical circuits), we had our home energy quality checked by an electrical-quality consultant and discovered that I was being exposed to about eleven times the amount of electrical pollution that is allowable by code.
5. After we installed filters to clear the current in our home of the damaging radio-frequencies coming in with the utility-provided electricity, and got rid of dimmer switches and CFLs that were adding to the problem, my symptoms disappeared.

6. Two of the medical doctors I had been consulting concluded that my symptoms had been caused by my exposure to electrical pollution.

7. At the time I underwent the extensive medical tests, it was discovered that I had slightly low thyroid function and I was put on a low dose of thyroid hormone. As I recovered from the stress of exposure to electrical pollution, my thyroid returned to normal function and I was able to discontinue the hormone. (Thyroid function has been shown by research to be adversely affected by exposure to radio and microwaves.)

8. Although I am symptom-free in our now “electrically sanitized” home environment, I remain electrically sensitive and must strictly limit the amount of time I spend in locations where there are high levels of electrical pollution and/or communications-frequency radiation. For instance, since our local library installed Wi-Fi, I can no longer be there for more than about 10 minutes before I get a terrible pain in the center of my forehead. After visits to urban areas with both high levels of electrical pollution and communications-signal radiation, I am exhausted and unable to sleep the following night.

9. I became vitally interested in the health effects of exposure to manmade electromagnetic frequencies and eventually created a website to share information and research about it: www.LifeEnergies.com/. There are links there to considerable research showing that our present exposure standards are based on the false premise that unless heating occurs, non-ionizing radiation causes no biological effects or damage.

10. Americans deserve to have exposure standards that are based on reality and current science.

11. We deserve the freedom to choose what electromagnetic frequencies we are exposed to, just as we may choose whether to use certain chemicals.

12. The United States is supposed to follow The Precautionary

Principle, not use its citizens as guinea pigs by rolling out new technologies under insufficient safety standards and lacking knowledge regarding the long-term health effects

13. We ought to be working to decrease our exposure to harmful radiation, not increase it.

14. The prospect of exposure to universal broadband is literally horrifying to me. Where and how would I live?

15. I ask that the FCC accept this affidavit and the attached exhibits into evidence for consideration under FCC 09-31, A National Broadband Plan for Our Future, as it is material evidence of the existence of signals to which my family and I are subject, yet without proper standards based on current science.

Shivani Arjuna

Exhibit A

Public statements and appeals made by independent researchers & informed doctors, concerned about the health effects of exposure to electromagnetic radiation. Excerpted from
<http://lifeenergies.com/he-emr/>

The Vienna Resolution

In October 1998, at the University of Vienna Workshop on Possible Biological and Health Effects of Radio Frequency Electromagnetic Fields, [ref. 15] the following resolution was adopted by the participating scientists.

“The participants agreed that biological effects from low-intensity exposures are scientifically established. However, the current state of scientific consensus is inadequate to derive reliable exposure standards. The existing evidence demands an increase in the research efforts on possible health impact and on adequate exposure and dose assessment.”

In his summary report, Dr. Cherry concludes: “Scientific studies at the cellular level, whole animal level and involving human populations, show compelling and comprehensive evidence that RF/MW exposure down to very low levels, levels which are a minute fraction of present “safety standards”, result in altered brain function, sleep disruption, depression, chronic fatigue, headache, impaired memory and learning, adverse reproductive outcomes including miscarriage, still birth, cot death, prematurity and birth deformities. Many other adverse health effects have been found, predominantly cancer of many organs, especially brain cancer, leukemia, breast cancer and testicular cancer. Studies have also found that RF/MW exposed parents have more children with CNS cancers and other health defects.

These effects are consistent with genetic damage caused by RF/MW. Many scientific studies have found chromosome aberrations and DNA damage with RF/MW exposure, the first being published in 1959. Two primary biological mechanisms are linked to these effects, calcium ion efflux and melatonin reduction. With melatonin reduction, there is a rise in serotonin, which is associated with awakeness, alertness, anxiety, anger, rage and violence depending on the serotonin level, the person and the circumstances.

Hence, there is strong evidence that ELF and RF/MW is associated with accelerated aging (enhanced cell death and cancer) and moods, depression, suicide, anger, rage and violence , primarily through alteration of cellular calcium ions and the melatonin/serotonin balance.”

As reported at: EMF Issues

“More than 100 epidemiological studies have shown an association between residential and occupational EMF exposure and many types of cancer. The association between EMF exposure and childhood cancer is especially strong. This scientific evidence led the 28 member panel convened by the National Institute of Environmental Health Sciences (NIEHS) to conclude on July 24, 1998, that extremely low frequency (ELF) electromagnetic fields should be regarded as possible carcinogens. The final vote of the panel was 19 to 9 in favor of categorizing ELF EMFs, such as those from power lines and electrical appliances, as possible carcinogens. The vote followed a year of exhaustive evaluation of the scientific

literature, three multi-day symposia attended by many international scientists, and a final 10 day review and debate of the scientific and medical literature in a closed meeting in Minnesota.”

The Salzburg Resolution signed by 19 scientists and public health doctors from 10 countries, was the outcome of the first international conference dedicated to public health issues connected with exposure to Base-station emissions, which was held in Salzburg in June 2000. The Salzburg Resolution recommends that outdoor exposure should be below 1mW/m^2 ($0.1\mu\text{W/cm}^2$) - equivalent to an electric field of 0.6 volts per metre (V/m) - in publicly accessible areas surrounding such an installation. It should be noted that this value is 4500(9000) times lower than the ICNIRP Guideline value for 900(1800)MHz radiation.

The Catania Resolution signed by 16 eminent scientists of international standing from 7 different countries, following a conference in Sicily in September 2002 states: “Epidemiological and in vivo and in vitro experimental evidence demonstrates the existence for electromagnetic field induced effects which can be adverse health. .. ‘The weight of evidence calls for preventive strategies based on the Precautionary Principle.”

The Freiburger Appeal

In October 2002 a team of over 50 German medical doctors started the Freiburger Appeal. After seeing a dramatic rise in severe and chronic diseases, they have noted a clear temporal and spatial correlation between disease and exposure to microwave radiation. The appeal has since been signed by thousands of doctors.

“Out of great concern for the health of our fellow human beings do we - as established physicians of all fields, especially that of environmental medicine - turn to the medical establishment and those in public health and political domains, as well as to the public. We have observed, in recent years, a dramatic rise in severe and chronic diseases among our patients, especially:

- * Learning, concentration, and behavioural disorders (e.g. attention deficit disorder, ADD)
- * Extreme fluctuations in blood pressure, ever harder to influence with medications

- * Heart rhythm disorders
- * Heart attacks and strokes among an increasingly younger population
- * Brain-degenerative diseases (e.g. Alzheimer's) and epilepsy
- * Cancerous afflictions: leukemia, brain tumors

Moreover, we have observed an ever-increasing occurrence of various disorders, often misdiagnosed in patients as psychosomatic:

- * Headaches, migraines
- * Chronic exhaustion
- * Inner agitation
- * Sleeplessness, daytime sleepiness
- * Tinnitus
- * Susceptibility to infection
- * Nervous and connective tissue pains, for which the usual causes do not explain even the most conspicuous symptoms

Since the living environment and lifestyles of our patients are familiar to us, we can see (especially after carefully-directed inquiry) a clear temporal and spatial correlation between the appearance of disease and exposure to pulsed high-frequency microwave radiation (HFMR), such as:

- * Installation of a mobile telephone sending station in the near vicinity
- * Intensive mobile telephone use
- * Installation of a digital cordless (DECT) telephone at home or in the neighbourhood

We can no longer believe this to be purely coincidence, for:

- * Too often do we observe a marked concentration of particular illnesses in correspondingly HFMR-polluted areas or apartments;
- * Too often does a long-term disease or affliction improve or disappear in a relatively short time after reduction or elimination of HFMR pollution in the patient's environment;
- * Too often are our observations confirmed by on-site measurements of HFMR of unusual intensity.

On the basis of our daily experiences, we hold the current mobile communications technology (introduced in 1992 and since then globally extensive) and cordless digital telephones (DECT standard) to be among the fundamental triggers for this fatal development.

One can no longer evade these pulsed microwaves. They heighten the risk of already-present chemical/physical influences, stress the body's immune system, and can bring the body's still-functioning

regulatory mechanisms to a halt. Pregnant women, children, adolescents, elderly and sick people are especially at risk.

Our therapeutic efforts to restore health are becoming increasingly less effective: the unimpeded and continuous penetration of radiation into living and working areas (particularly bedrooms, an essential place for relaxation, regeneration and healing) causes uninterrupted stress and prevents the patient's thorough recovery.

In the face of this disquieting development, we feel obliged to inform the public of our observations, especially since hearing that the German courts regard any danger from mobile telephone radiation as "purely hypothetical." (See the decisions of the constitutional court in Karlsruhe and the administrative court in Mannheim , Spring 2002). What we experience in the daily reality of our medical practice is anything but hypothetical!

We see the rising number of chronically sick patients also as the result of an irresponsible "safety limits" policy, which fails to take the protection of the public from the short- and long-term effects of mobile telephone radiation as its criterium for action. Instead, it submits to the dictates of a technology already long recognized as dangerous.

For us, this is the beginning of a very serious development through which the health of many people is being threatened.

We will no longer be made to wait upon further unreal research results - which in our experience are often influenced by the communications industry - while evidential studies go on being ignored. We find it to be of urgent necessity that we act now!

Above all, we are, as doctors, the advocates for our patients. In the interest of all those concerned, whose basic right to life and freedom from bodily harm is currently being put at stake, we appeal to those in the spheres of politics and public health.

Please support the following demands with your influence:

- * New health-friendly communications techniques, given independent risk assessments before their introduction

and, as immediate measures and transitional steps:

- * Stricter safety limits and major reduction of sender output and HFMR pollution on a justifiable scale, especially in areas of sleep and convalescence

- * A say on the part of local citizens and communities regarding the

placing of antennae (which in a democracy should be taken for granted)

- * Education of the public, especially of mobile telephone users, regarding the health risks of electromagnetic fields
 - * Ban on mobile telephone use by small children, and restrictions on use by adolescents
 - * Ban on mobile telephone use and digital cordless (DECT) telephones in preschools, schools, hospitals, nursing homes, events halls, public buildings and vehicles (as with the ban on smoking)
 - * Mobile telephone and HFMR-free zones (as with auto-free areas)
 - * Revision of DECT standards for cordless telephones with the goal of reducing radiation intensity and limiting actual use time, as well as avoiding the biologically critical HFMR pulsation
 - * Industry-independent research, finally with the inclusion of amply available critical research results and our medical observations
- The Helsinki Appeal 2005 from EMF Team Finland calls on the European Parliament to act promptly for the adoption of the new safety standard in the European Union. Physicians and researchers feel great concern about the Precautionary Principle not being sufficiently applied to electromagnetic fields. They want the standards recommended by ICNIRP to be rejected, because recent scientific studies report various disturbances caused by mobile phone and other RF radiation.

The European Parliament Resolution B3-0280/92, clauses D and E, bases its concern on the matter of EMF health effects, in part, on recognition that the cell membrane is the primary site of cellular interaction of EMF and living tissues:

D. whereas, according to an increasing number of epidemiological and experimental studies, even slight exposure to non-ionizing electromagnetic fields increases the risk of cancer, can be accompanied by nervous disorders and disruption of the circadian rhythm and seems capable of affecting developing organisms,

E. whereas the results of many in vivo and in vitro studies

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